

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number
WO 2005/060156 A1

(51) International Patent Classification⁷: **H04L 12/18**,
12/42, 12/433

(21) International Application Number:
PCT/EP2004/053185

(22) International Filing Date:
30 November 2004 (30.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03368121.4 19 December 2003 (19.12.2003) EP

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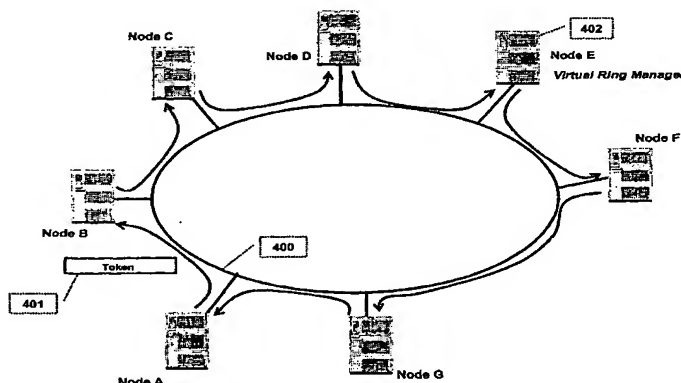
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

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(54) Title: **SYSTEM AND METHOD FOR COMMUNICATING ON A VIRTUAL RING IN AN INTERNET PROTOCOL NETWORK**



(57) Abstract: The present invention is directed to a system, method, computer program in a node within a network comprising a transport layer protocol providing end to end data transfer, for multicasting datagrams on a virtual ring, each node on the virtual ring being logically connected according to the network transport layer protocol to two and only two neighbor nodes through virtual connections, an upstream neighbor node and a downstream neighbor node. The method comprises the steps of: • sending a virtual ring datagram to the downstream neighbor node on the virtual ring; said virtual ring datagram comprising a virtual ring identifier, means for identifying the node originator of the virtual ring datagram, and data; receiving a token, identifying the virtual ring and forwarding the token to the downstream neighbor node on the identified virtual ring; if the received datagram is a virtual ring datagram: identifying the virtual ring and checking the node originator of the received virtual ring datagram; if the received virtual ring datagram has not been locally originated: • processing data comprised in said virtual ring datagram; • forwarding said virtual ring datagram to the downstream neighbor node on the identified virtual ring; if the received virtual ring datagram has been locally originated: removing the virtual ring datagram from the virtual ring.

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FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

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